A Monthly Report from The Conference Board

INTERNATIONAL ECONOMIC SCOREBOARD

The Conference Board

R4105-6A

FEBRUARY, 1984

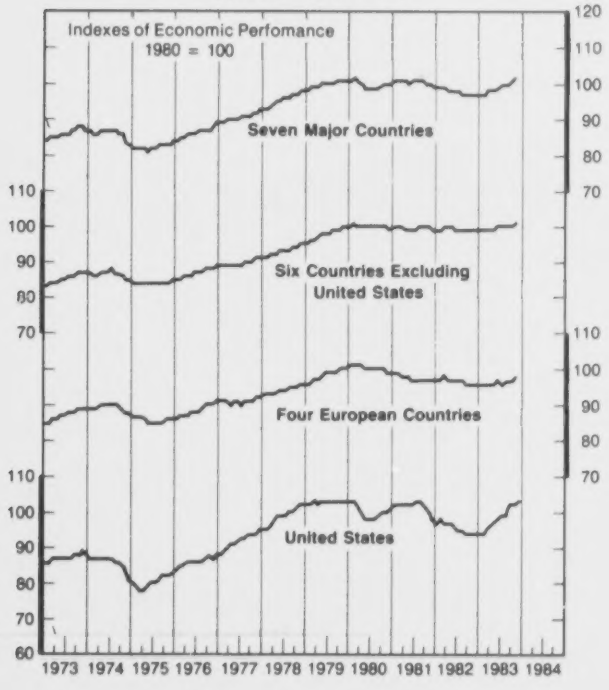
SUMMARY

Growth rates in the leading economic indexes for the seven major industrial nations continue to register solid progress toward economic recovery. Japan's 13% rate topped the list, followed closely by the U.S. at 12%. Growth rates in the leading indexes for Canada, West Germany and Italy ranged from 10% to 7%, while the United Kingdom and France clocked a sluggish 2%. Upswings in the economic performance indexes, which measure total economic activity and move coincidently with it, continue to show less vigor than the leaders. Nevertheless, all countries except Italy seem to have turned the corner.

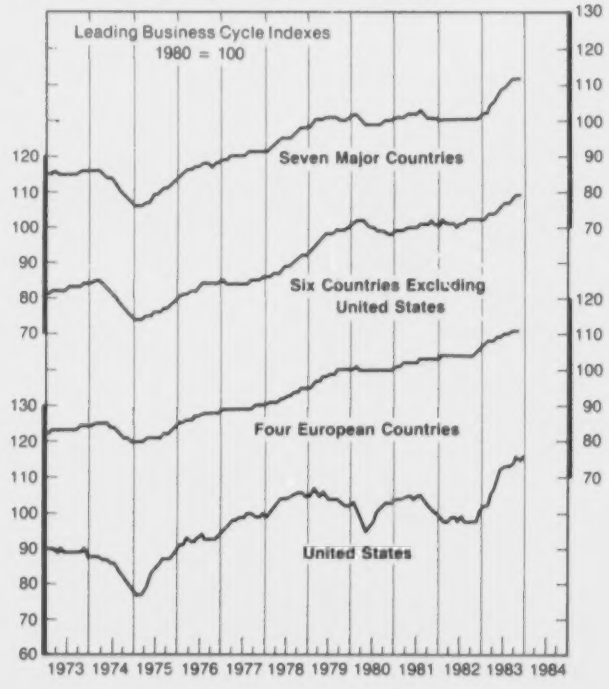
		*Indexes of Economic Performance Growth Rates**			*Leading Business Cycle Indexes Growth Rates**				
	Ten-year Growth Rate 1969-79	*6 mos. ago*	*3 mos. ago*	*Latest month*	*6 mos. ago*	*3 mos. ago*	*Latest month*	*Current Reading on the Cycle*	*Latest Month Covered*
	annual rates, percent								
United States	3	7	10	11	20	17	12	Strong expansion continuing	Dec.
Canada	4	3	6	6	15	16	10	Strong expansion continuing	Nov.
Japan	5	0	4	3	5	8	13	Expansion continuing	Nov.
United Kingdom	2	- 1	0	1	4	1	2	Leaders up slowly; economy sluggish	Nov.
West Germany	3	1	1	2	8	8	9	Slow recovery underway	Nov.
France	4	2	2	3	8	6	2	Slow recovery underway	Nov.
Italy	3	- 5	- 1	- 2	5	5	7	Leaders advancing; economy weak	Oct./Sept.
7 countri	3	2	5	6	11	12	10	Expansion continuing	Nov.
6 countries ex. U.S.	4	0	2	3	6	7	8	Recovery continuing	Nov.
4 European countries	3	0	1	3	6	6	5	Recovery continuing	Nov.
3 countries ex. Europe	4	3	6	8	14	15	13	Expansion continuing	Nov.

*Annual rate based on ratio of current month's index to average index over the preceding 12 months.

Where We Are


Indexes of Economic Perfomance
1980 = 100
Seven Major Countries
Six Countries Excluding United States
Four European Countries
United States
1973 1974 1975 1976 1977 1978 1979 1980 1981 1982 1983 1984

Where We're Headed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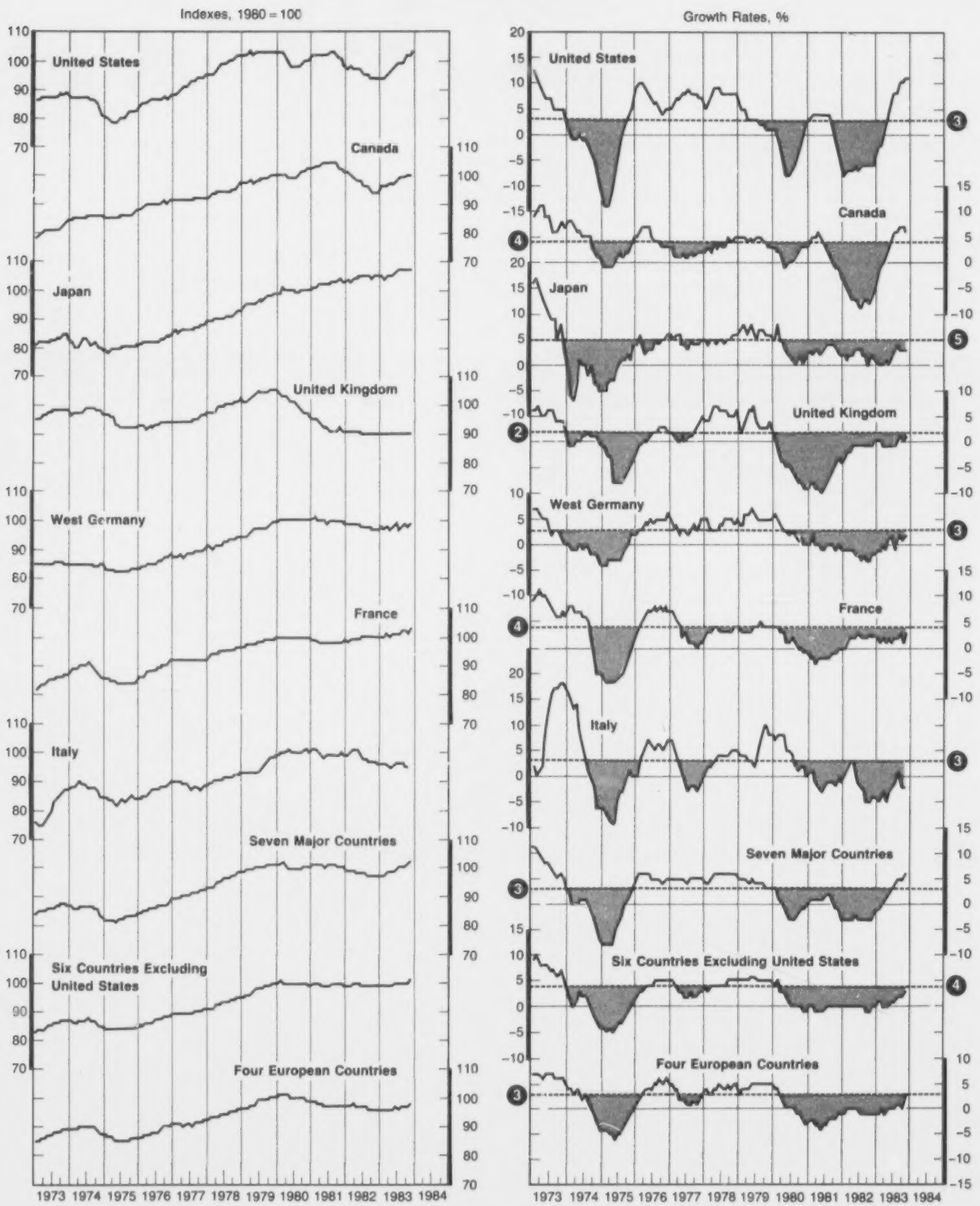
Where We Are

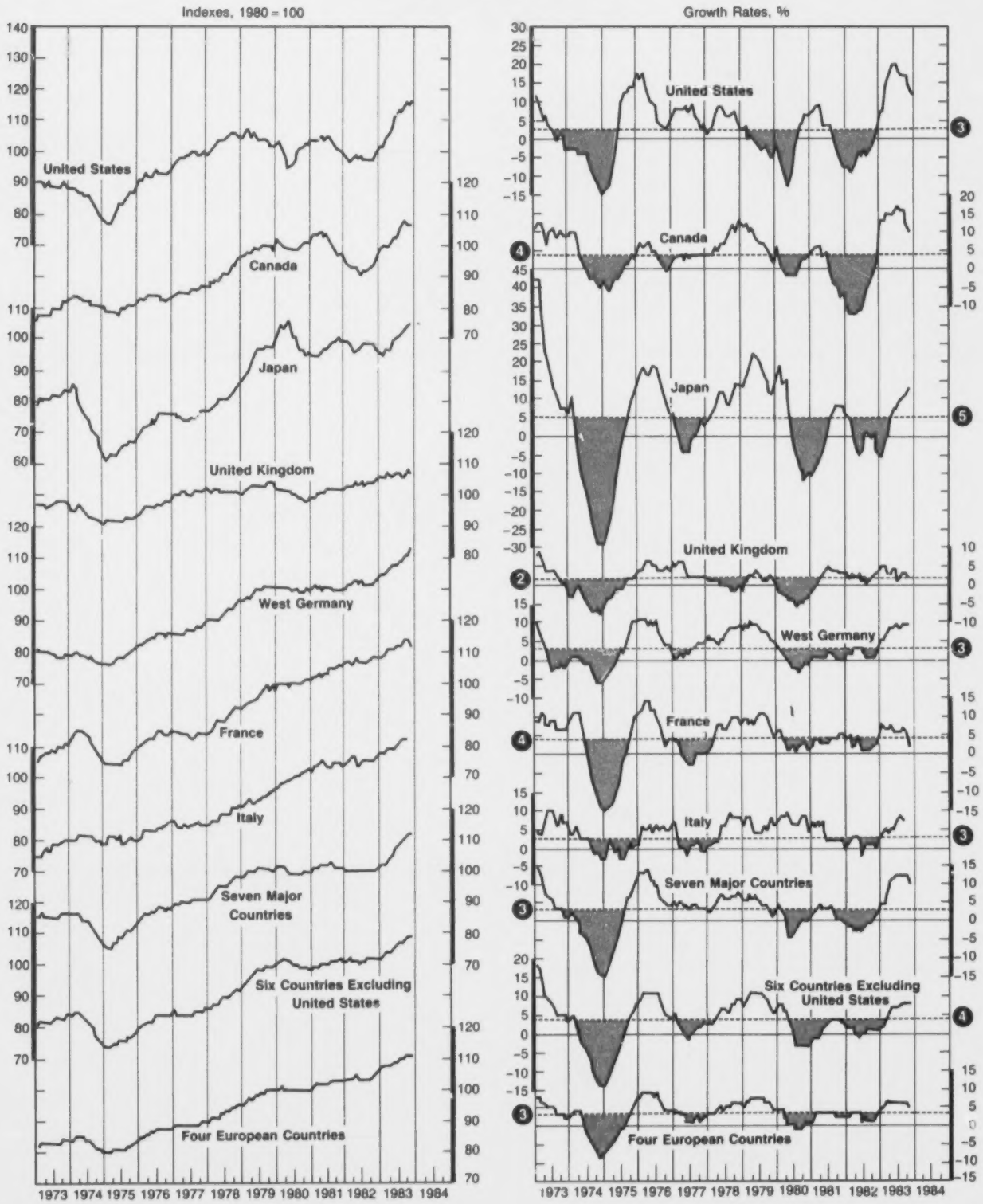
Indexes of Economic Performance



Note: Horizontal dashed lines are average growth rates for 1969-79 in the index and in real GNP
Source: The Conference Board

Where We're Headed

Leading Business Cycle Indexes



Note: Horizontal dash lines are average growth rates for 1969-79 in the index and in real GNP.
Source: The Conference Board

2

THE RECORD OF THE LEADING INDICATORS

By now, the usefulness of monitoring business cycles with indicator systems is well-established in the United States. In the past twenty-five years, the practice of studying the leading indicators for clues as to what is happening now and might happen in the immediate future has become common among economists in both business and government. Whether one is interested in cyclical development in general or in the likely impact of cyclical changes on a particular business or industry, leading indicators can provide a valuable guide both to "forecasting the present" and to predicting future changes.

Increasingly, too, U.S.-style indicator systems are catching on in other countries. Studies at the Center for International Business Cycle Research at Columbia have shown that this development is justified. The same economic factors that explain why the leading indicators lead in the United States also operate abroad and produce substantially similar results.

The accompanying table shows the average lead time, in months, of each of the leading indicators that form the composite leading indexes in the Scoreboard. A minus sign—say, -3—means that in the past the indicator has reached its turning point, on the average, three months before the turning point in the economy. Where there is a plus sign, as in the case of the average workweek in Italy, the indicator lagged behind the economy more often than not.

The vast majority of the entries in the table are minuses, that is, leads. There are three zeroes, meaning coincident behavior; four pluses, or lags; and 78 minuses, or leads. The composite indexes themselves all lead, and the entries for the seven countries taken together show that every single indicator leads, on average.

The reader may wonder why, if the indicators are selected because of their tendency to lead the economy into and out of recession, there are any entries showing lags. Why aren't such indicators rejected? The answer is that the indicators were originally selected on the basis of their behavior in the United States, in studies completed a number of years ago. This left open the possibility, however, that in some countries they might not perform the same way, and when the international indicator system was set up one objective was to see whether they did or not. By and large, the indicators performed as expected, and consequently the entire set was left as is. This had the advantage of preserving comparability across countries, to the degree that is attainable from available statistics. Moreover, it is not always easy to ascertain whether deviant behavior is

Median Leads and Lags of Leading Indicators at Growth Cycle Peaks and Troughs, Seven Countries

Indicators: U.S. Classification and U.S. Title[a]	*United States*	*Canada*	*Japan*	*United Kingdom*	*West Germany*	*France*	*Italy*	*Seven Countries*
	lead (−) or lag (+), in months							
Average workweek, manufacturing	− 2	− 4	− 4	− 2	− 2	− 3	+ 2	− 2
New unemployment claims[b]	− 2	− 2	NA	NA	− 2	NA	NA	− 2
New orders, consumer goods[c]	− 2	− 1	NA	NA	NA	−11	− 8	− 5
Formation of business enterprises	− 4	NA	−13	− 8	− 8	NA	− 6	− 8
Contracts and orders, plant and equipment[c]	− 2	+ 2	− 4	− 3	− 4	NA	NA	− 3
Building permits, housing	− 7	− 5	− 9	−11	+ 8	− 8	− 2	− 7
Change in business inventories[c]	− 1	0	− 2	− 5	− 4	NA	NA	− 2
Change in industrial materials prices	− 4	− 3	− 7	+ 3	0	− 1	NA	− 2
Stock price index	− 4	− 4	− 6	− 8	− 7	− 8	− 8	− 7
Profits[c]	− 2	− 3	−10	− 3	− 9	NA	NA	− 3
Ratio, price to unit labor cost	− 7	0	− 2	−12	− 9	− 4	NA	− 6
Change in consumer debt[c]	− 6	− 7	− 9	−16	−18	NA	NA	− 9
Composite Leading Index	− 2	− 2	− 4	− 6	− 6	− 4	− 5	− 4

Note: NA = Indicator not available.

a The indicator available for each country is sometimes only roughly equivalent in content to the U.S. indicator. In some cases two indicators are used to match the U.S. indicator and the median covers all observations for both indicators. The periods covered vary for each indicator and each country, but all are within the years 1948-1981. The growth cycle peaks and troughs are based upon turning points in output, employment, real income and sales after long-run growth trends are eliminated.

b Inverted.

c In constant prices.

systematic or simply a temporary aberration. At any rate, the overall record is quite good. A batting average of over 90 percent is pretty good in any league.

Drawing on the table, here are some observations worth noting about the indicators:

(1) Stock prices, profits, and the ratio of prices to unit labor costs all lead the business cycle, and are obviously related to one another. Stock prices are influenced by earnings and earnings are influenced by margins, for which the price/labor-cost ratio is a good proxy.

(2) Changes in inventories and the rate of change in materials prices both show leads in most instances. The accumulation of inventories of materials often goes hand in hand with a firming of prices, while liquidation makes for a softening of prices.

(3) Commitments for new investment—represented by the formation of business enterprises, contracts and orders for plant and equipment, and building permits for new housing—show leads for the most part, evidencing their close connection with the indicators of profitability. But actul investment expenditures are not in the leading group. They follow the commitments, and they follow, not lead, the business cycle.

(4) Only two series relating directly to consumption are in the table—new orders for consumer goods and change in consumer debt. They anticipate the movement of total retail sales, which move with the business cycle but seldom before it.

(5) The two leading indicators pertaining directly to employment and unemployment are the average workweek and initial claims for employment insurance. Shorter or longer workweeks are a management device to give quick effect to decisions to change labor input. Putting in a claim for unemployment insurance benefits is one of the first steps a newly employed worker takes. Hence, these are early warning indicators of developments that show up later in the employment and unemployment numbers.

As this analysis suggests, the historical record is not the only reason for thinking that the leading indicators will continue to give advance warning of recessions and recoveries. Equally basic are the business practices and economic interrelationships that explain why they do so. Behind every one of the leading indicators lies a rationale, formulated and tested over many years by economists in business, government and academia. Without that, it is doubtful that the system would have survived, and even more doubtful that it should have deserved survival.

INDEXES, SEVEN COUNTRIES, 1982-83

	U.S.		Canada		Japan		U.K.		West Germany		France		Italy		7 Countries		6 Countres ex. U.S.		4 Countries Europe	
	Indexes, 1980 = 100																			
	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.
Dec. 82	94	100	94	96	105	96	90	105	97	104	100	108	96	107	97	101	99	102	96	106
Jan. 83	94	102	96	99	105	95	90	106	98	105	100	109	96	108	97	102	99	102	96	107
Feb. 83	94	102	96	100	104	94	90	106	97	105	100	111	96	102	97	102	99	103	96	108
Mar. 83	95	105	96	100	105	96	90	107	98	106	101	111	96	109	98	104	99	104	96	108
Apr. 83	96	107	97	102	105	96	90	106	97	107	100	111	95	109	98	105	99	104	96	108
May 83	97	109	97	103	105	99	90	107	98	108	101	112	95	109	98	107	99	105	96	109
June 83	98	112	98	103	106	100	90	107	99	108	101	112	96	110	99	108	100	106	97	109
July 83	99	113	99	105	107	101	90	107	97	109	101	112	96	111	100	109	100	107	96	110
Aug. 83	99	113	99	106	107	102	90	106	98	110	102	113	96	112	100	110	100	107	97	110
Sept. 83	101	114	100	108	107	103	90	107	99	111	102	114	95	112	100	111	100	108	97	111
Oct. 83	102	116	100	107	107	104	90	108	98	111	101	114	95		101	112	100	109	97	111
Nov. 83	102	115	100	107	107	105	90	107	99	113	103	112			102	112	101	109	98	111
Dec. 83	103	116																		
	Growth Rates, Percent																			
Dec. 82	- 5	3	- 5	5	1	-3	0	3	- 2	3	2	3	- 4	2	- 2	2	0	1	- 1	3
Jan. 83	- 2	7	- 2	11	0	-5	0	4	- 1	5	2	5	- 5	3	- 1	4	- 1	2	- 1	4
Feb. 83	- 2	7	- 1	13	0	-6	0	5	- 1	5	1	8	- 4	4	- 1	4	- 1	2	- 1	5
Mar. 83	0	11	0	13	0	-2	- 1	5	0	6	2	7	- 3	5	0	7	0	4	0	6
Apr. 83	2	14	1	15	1	0	- 1	3	- 1	7	1	7	- 5	4	1	8	0	5	- 1	6
May 83	5	17	3	15	0	5	- 1	4	1	8	2	8	- 3	5	2	11	0	6	0	6
June 83	7	20	5	15	1	7	- 1	4	2	8	1	6	- 2	5	3	12	1	7	0	6
July 83	8	20	6	17	3	7	- 1	4	- 1	9	2	6	- 1	7	4	12	1	7	0	6
Aug. 83	8	18	6	16	4	8	0	1	1	8	2	6	1	8	5	12	2	7	1	6
Sept. 83	10	17	7	16	3	10	1	3	2	9	3	7	- 2	7	5	12	2	8	1	6
Oct. 83	10	17	7	12	3	11	0	3	1	9	1	6	- 2		5	12	2	8	0	6
Nov. 83	11	14	6	10	3	13	1	2	2	9	3	2			6	10	3	8	3	5
Dec. 83	11	12																		
	Ten Year Annual Growth Rate, Percent																			
1969-79	3	3	4	4	5	5	2	2	3	3	4	4	3	3	3	3	4	4	3	3

THE INTERNATIONAL ECONOMIC INDICATOR SYSTEM

Each issue of the *Scoreboard* includes indexes of economic performance for the major industrial nations as well as the leading indexes. The economic performance indexes are composites of such series as real GNP, industrial production, employment and sales—what analysts call "coincident" series, because they *define* the business cycle.

The leading indexes are composites of such series as new orders, construction contracts, corporate profits and stock prices—indicators that usually anticipate changes in production and employment by several months. Thus the indexes of economic performance tell us the current status of the business cycle, i.e., where we are, while the leading indexes tell us where the economy is headed.

Experience has shown that when the leading index begins to rise faster, it is a fairly safe rule that the economy will soon begin to rise faster too—typicaly after three or four months. When the leading index begins to rise more slowly or to decline, the economy is likely to follow suit shortly thereafter. (For details, see "What the Leading Indicators Indicate," *Across The Board*, April 1980 and *Business Cycles, Inflation and Forecasting*, Ballinger Publishing Co., 1983.) Considerable variation in the length of lead is to be expected, however. Constant monitoring is needed to make effective use of the system and get early warnings of recessions and recoveries, changes in foreign trade flows, and new inflationry trends.

The indexes for the seven major industrial nations were developed by Geoffrey H. Moore and Philip A. Klein, and are maintained by the Center for International Business Cycle Research at the Columbia Business School. (The U.S. indexes used here differ slightly from the indexes reported monthly by the U.S. Dept. of Commerce.) To facilitate analysis the indexes are adjusted so their long-run growth rates, 1969-79, are equal to those in real GNP in the country concerned. These growth rates are shown at the bottom of the table on the back page and by horizontal lines on the right panel of the charts on pages 2 and 3.

Another Reminder, Revisions:

Beginning January 1984, the indexes are shown with 1980 = 100 rather than 1970 = 100. The long-run growth rate (see above) is for 1969-79, not 1966-76. The composite indexes for groups of countries are weighted by each country's GNP in 1980, not 1970, and a new index is shown for the U.S., Canada and Japan. A few changes have been made in the components of the indexes.

For More Information

To find out more about this indicator system and the availability of detailed data for each country please address inquiries to:

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(02) 640 62 40 Telex 63635

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SUMMARY

The international business-cycle upswing continues to spread. West Germany and France have joined the group of countries that have rapidly rising leading indexes. The latest growth rates for this group are: France, 13%; U.S., 12%; Japan, 11%; Canada, 10%; West Germany, 9%. Leading index growth rates for the United Kingdom and Italy are still in the 3 to 4% growth rate range. Some growth is better than none, however, and the leading index for all seven countries taken together is advancing at a 10% clip. The economic performance indexes also are rising in all countries except Italy.

		*Indexes of Economic Performance Growth Rates**			*Leading Business Cycle Indexes Growth Rates**				
	Ten-year Growth Rate 1969-79	*6 mos. ago*	*3 mos. ago*	*Latest month*	*6 mos. ago*	*3 mos. ago*	*Latest month*	*Current Reading on the Cycle*	*Latest Month Covered*
	annual rates, percent								
United States	3	8	10	11	21	17	12	Strong expansion continuing	Jan.
Canada	4	5	7	6	15	16	10	Strong expansion continuing	Dec.
Japan	5	1	3	3	8	10	11	Expansion continuing	Dec.
United Kingdom	2	- 1	1	2	3	3	5	Slow recovery underway	Dec.
West Germany	3	2	2	3	8	9	9	Expansion continuing	Dec.
France	4	0	1	2	6	8	13	Slow recovery underway	Dec./Jan.
Italy	3	- 5	- 1	- 2	5	8	3	Leaders advancing; economy weak	Oct./Nov.
7 countries	3	3	5	6	12	12	10	Expansion continuing	Dec.
6 countries ex. U.S.	4	1	2	2	7	8	8	Recovery continuing	Dec.
4 European countries	3	0	1	2	6	7	7	Recovery continuing	Dec.
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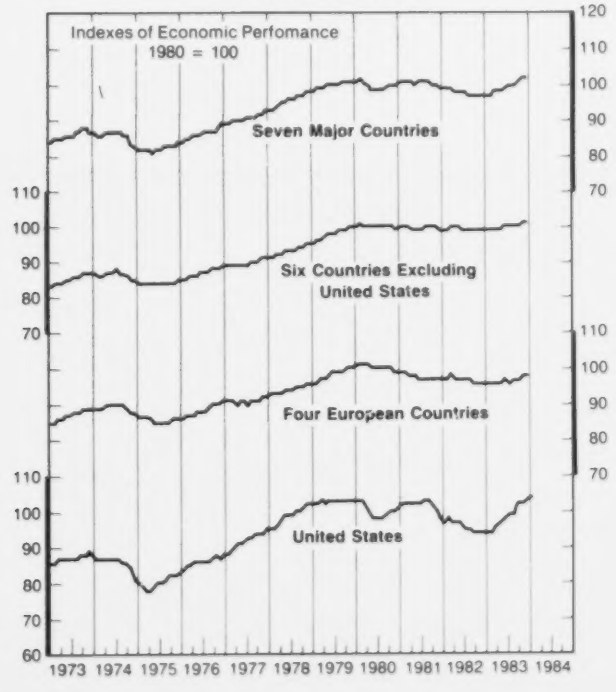
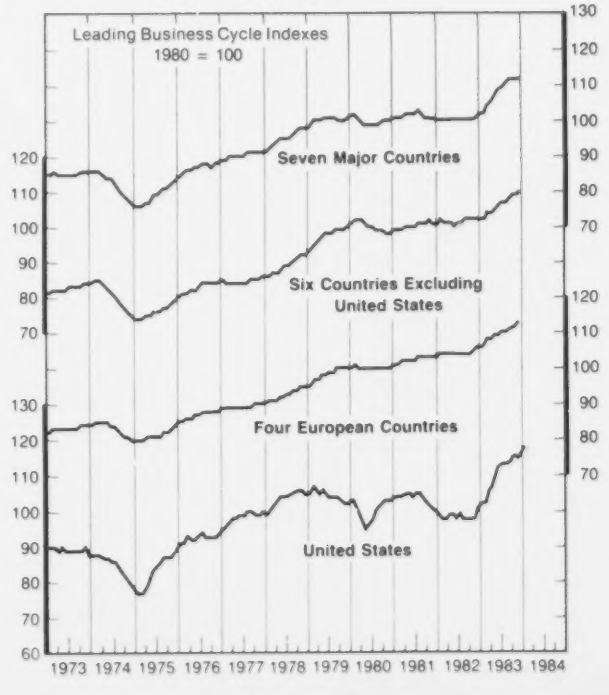
*Annual rate based on ratio of current month's index to average index over the preceding 12 months.

Where We Are



Where We're Headed



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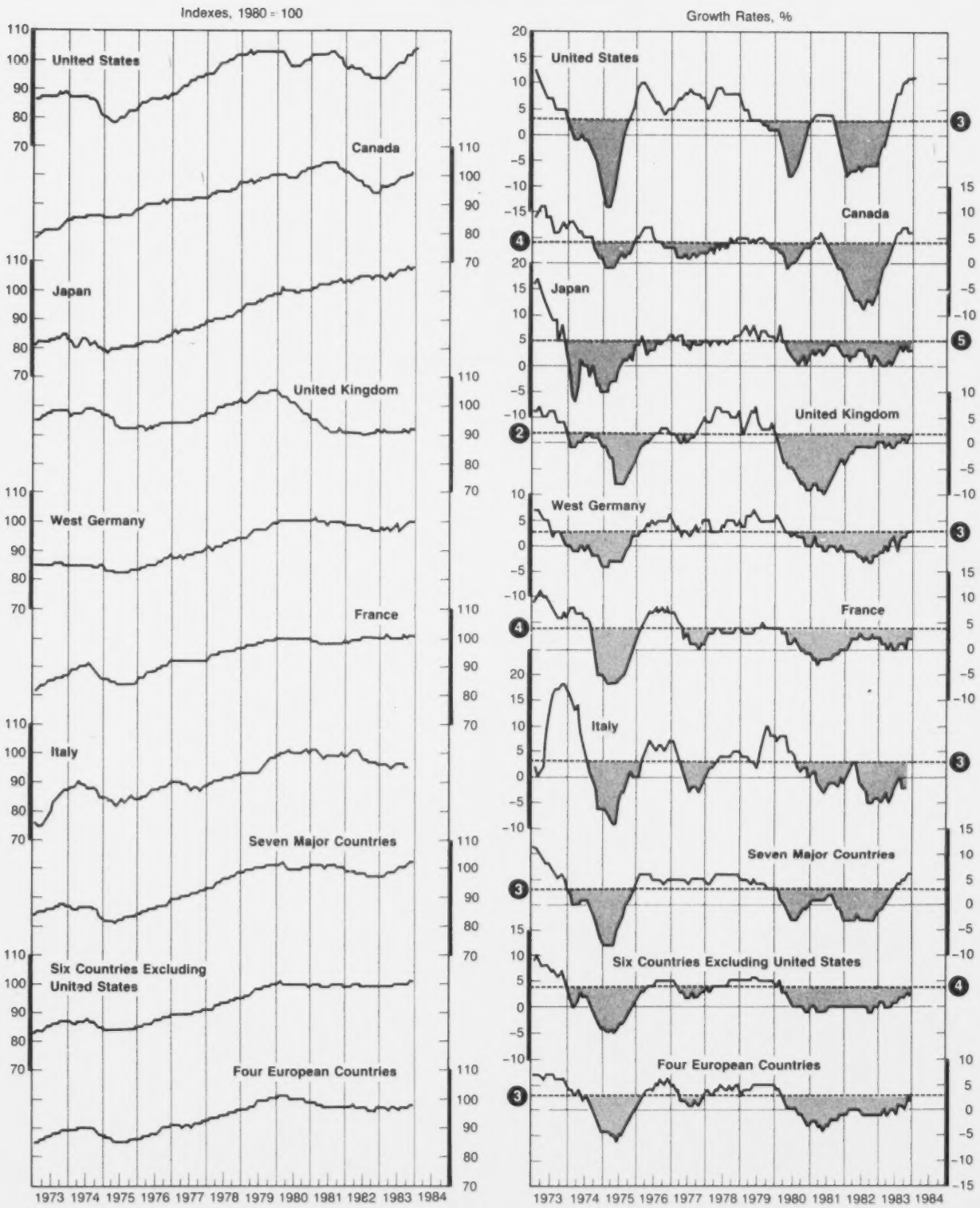
Where We Are

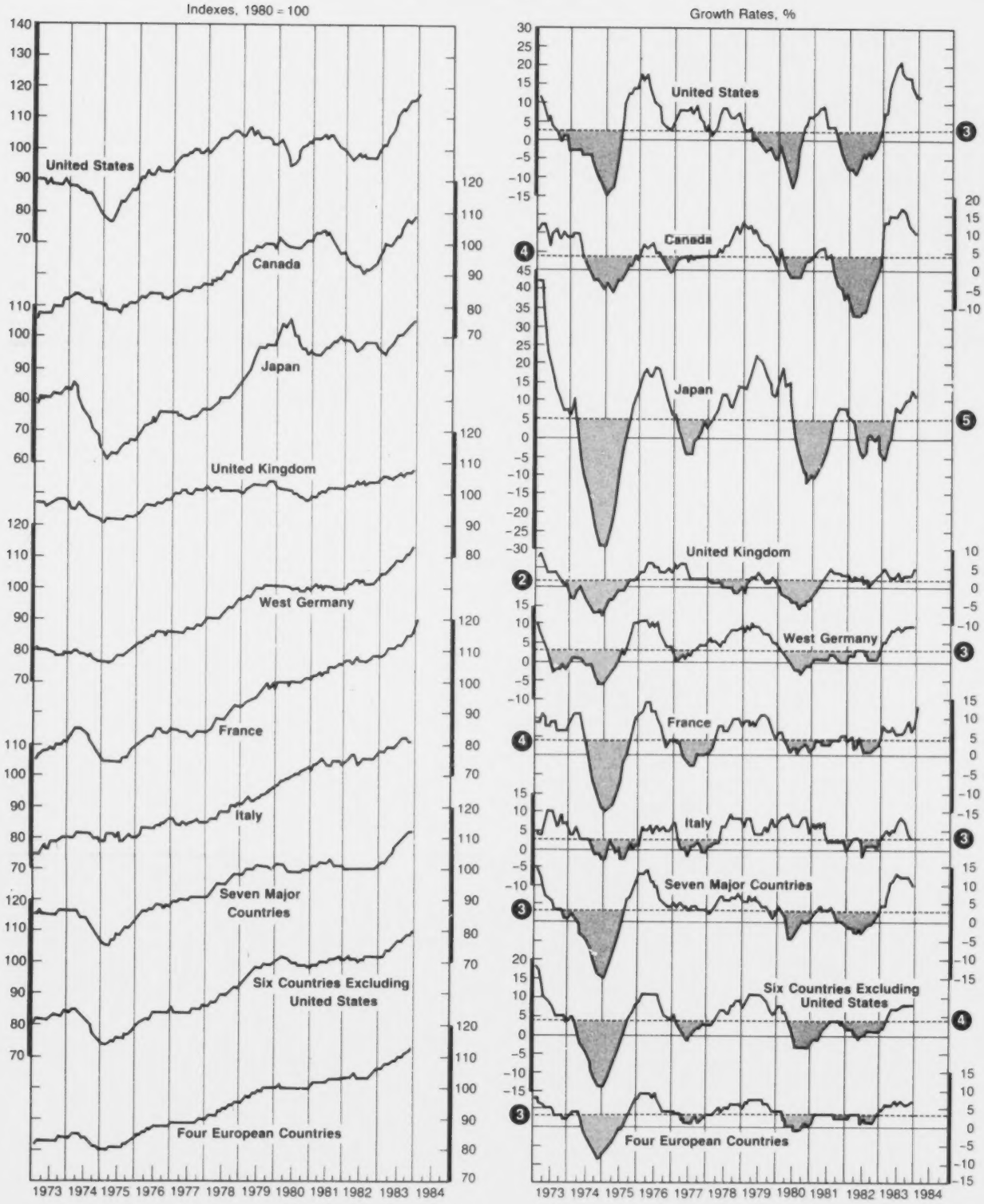
Indexes of Economic Performance



Note: Horizontal dashed lines are average growth rates for 1969-79 in the index and in real GNP.
Source: The Conference Board

Where We're Headed

Leading Business Cycle Indexes



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	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.	Perf.	Lead.
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Oct. 83	102	116	100	107	108	104	91	107	99	111	100	115	95	111	101	112	100	109	97	111
Nov. 83	102	116	100	108	107	105	92	107	100	112	101	115		111	102	112	101	109	98	112
Dec. 83	103	116	101	109	108	105	92	108	100	113	101	116			102	112	101	110	98	113
Jan. 84	104	118										120								
									Growth Rates, Percent											
Dec. 82	- 5	3	- 5	5	1	-3	0	3	- 2	3	2	3	- 4	2	- 2	2	0	1	- 1	3
Jan. 83	- 2	7	- 2	11	0	-5	0	4	- 1	5	2	5	- 5	3	- 1	4	- 1	2	- 1	4
Feb. 83	- 2	7	- 1	13	0	-6	0	5	- 1	5	1	7	- 4	4	- 1	4	- 1	2	- 1	5
Mar. 83	0	11	0	13	0	-2	- 1	4	0	6	1	7	- 3	5	0	7	0	4	0	6
Apr. 83	2	14	2	15	1	1	0	3	- 1	7	0	7	- 5	4	1	9	0	5	- 1	6
May 83	5	17	3	15	0	5	- 1	3	1	8	1	8	- 4	5	2	11	0	6	0	6
June 83	7	20	5	15	1	8	- 1	3	2	8	0	6	- 2	5	3	12	1	7	0	6
July 83	8	21	6	17	3	7	0	4	- 1	9	0	6	- 1	7	4	13	1	7	- 1	7
Aug. 83	8	18	6	16	4	8	0	2	1	8	1	6	-0	8	4	12	2	7	1	6
Sept. 83	10	17	7	16	3	10	1	3	2	9	1	7	- 2	7	5	12	2	8	1	7
Oct. 83	10	17	7	12	4	10	0	3	2	9	0	8	- 2	4	5	12	2	8	0	6
Nov. 83	11	14	6	11	3	13	1	3	3	9	2	6		3	6	11	3	8	3	6
Dec. 83	11	12	6	10	3	11	2	5	3	9	2	7			6	10	2	8	2	7
Jan. 84	11	12										13								
									Ten Year Annual Growth Rate, Percent											
1969-79	3	3	4	4	5	5	2	2	3	3	4	4	3	3	3	3	4	4	3	3

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The leading indexes are composites of such series as new orders, construction contracts, corporate profits and stock prices—indicators that usually anticipate changes in production and employment by several months. Thus the indexes of economic performance tell us the current status of the business cycle, i.e., where we are, while the leading indexes tell us where the economy is headed.

Experience has shown that when the leading index begins to rise faster, it is a fairly safe rule that the economy will soon begin to rise faster too—typically after three or four months. When the leading index begins to rise more slowly or to decline, the economy is likely to follow suit shortly thereafter. (For details, see "What the Leading Indicators Indicate," *Across The Board*, April 1980 and *Business Cycles, Inflation and Forecasting*, Ballinger Publishing Co., 1983.) Considerable variation in the length of lead is to be expected, however. Constant monitoring is needed to make effective use of the system and get early warnings of recessions and recoveries, changes in foreign trade flows, and new inflationry trends.

The indexes for the seven major industrial nations were developed by Geoffrey H. Moore and Philip A. Klein, and are maintained by the Center for International Business Cycle Research at the Columbia Business School. (The U.S. indexes used here differ slightly from the indexes reported monthly by the U.S. Dept. of Commerce.) To facilitate analysis the indexes are adjusted so their long-run growth rates, 1969-79, are equal to those in real GNP in the country concerned. These growth rates are shown at the bottom of the table on the back page and by horizontal lines on the right panel of the charts on pages 2 and 3.

Another Reminder, Revisions:

Beginning January 1984, the indexes are shown with 1980 = 100 rather than 1970 = 100. The long-run growth rate (see above) is for 1969-79, not 1966-76. The composite indexes for groups of countries are weighted by each country's GNP in 1980, not 1970, and a new index is shown for the U.S., Canada and Japan. A few changes have been made in the components of the indexes.

For More Information

To find out more about this indicator system and the availability of detailed data for each country please address inquiries to:

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